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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,863	01/17/2006	Paul Angers	ROBCA13.001APC	2836

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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER	
KATAKAM, SUDHAKAR	
ART UNIT	**PAPER NUMBER**
1621	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	02/23/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 02/23/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No.	Applicant(s)	
	10/523,863	ANGERS ET AL.	
	Examiner	Art Unit	
	Sudhakar Katakam	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/17/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The examiner has considered applicant's Information Disclosure Statement of 1/17/2006. Please refer to the signed copies of the PTO-1449 forms attached herewith.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 provides for the use of the conjugated linolenic acids in nutritional, cosmetic, and nutraceutical applications, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 12 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under

35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kass et al** (J.Am.Chem.Soc. vol.61, pages 3292-3294,1939) in view of **Takagi et al** (Lipids vol. 16, pages 546-551, 1981).

The instant claims are drawn to a method for preparing conjugated linolenic acids particularly the positional isomers of octadecatrienoic acid. The method comprising blending a mixture of vegetable oils and or fats, recovering conjugated linolenic acids

from the reaction mixture and the subjecting it to urea complexation or liquid chromatography.

Kass et al teaches the preparation of pseudo-eleostearic acid (a conjugated linolenic acid), viz., 10,12,14-octadecatrienoic acid by treating linseed oil fatty acids with a base (potassium hydroxide), in a polyol solvent (ethylene glycol), followed by crystallization [see Experimental section in page 3293].

The difference between the instant invention and **Kass et al** is that the instant application is subjected the reaction mixture to urea complexation or liquid chromatography, whereas **Kass et al** is silent on these methods in purifying the product. The claimed linolenic acids of the instant application are differed to the linolenic acid of the **Kass et al** teachings by the positions of double bonds in the acid.

Another difference is that instant claims defined the broad range of temperature for the process, whereas **Kass et al** have done the process at –18° under nitrogen for two hours in order to make the product, whereas instant application performed at from about 20°C to about 280°C over a period of time from about 30 seconds to about 18 hours.

With regard to the liquid chromatography, **Takagi et al** teaches a method to obtain a detailed composition of the fatty acids in oils containing more than one conjugated octadecatrienoic acid by liquid chromatography techniques [see Abstract].

Preparation of conjugated linolenic acids and their analogs, and their purification methods are known in the art. Conjugated unsaturated fatty acids have greater demand in manufacture of varnishes, drying oils, and their food compositions in treating various

diseases. **Kass et al** teach preparation of linolenic acid, viz., 10,12,14-octadecatrienoic acid. However, the position of double bonds in the linolenic acids of instant application is different from that of **Kass et al**. So, these are the isomers, i.e., positional isomers. Please note that the extraction process for one isomer reasonably applicable to the other isomer of the same compound. **Takagi et al** teach separation methods for the linolenic acids, for example, octadecatrienoic acids, from a mixture of an octadecatrienoates using liquid chromatography. So, **Kass et al** and **Takagi et al** teachings read the claims 1-8 of instant application.

Therefore, in view of explicit teachings of **Kass et al, Takagi et al** and the advantages of known preparation and purification methodology in the art, the examiner purports that it would have been obvious to a person of ordinary skill in the art, at the time of invention was made, to apply the purification methods taught by **Takagi et al**, to prepare linolenic acids of **Kass et al**, in order to make the reaction process more cost effective and to achieve good yields, with a reasonable expectation of success.

Some limitations of the dependent claims may not be expressly disclosed in **Kass et al** and **Takagi et al**. However, these limitations appear to be drawn to tweaking the process conditions, such as temperature and reaction time range, in the process of preparing conjugated linolenic acids.

Modifying such methodology is prima facie obvious because an ordinary artisan would be motivated to use known purification methods to make the process more efficient or explore economical advantages over the other, since it is within the scope to optimize the conditions through routine experimentation.

Claim 10 is considered to be a product by process claim. Even though product by process claims are limited by and defined by the process, the determination of patentability is based on the product itself. The independent claim 1 drawn to a method for preparing conjugated linolenic acids. So, it is obvious to a ordinary skilled person in the art to apply the same method to prepare other isomers of octadecatrienoic acids. Therefore it is obvious to obtain 6Z,8E,12Z-octadecatrienoic acid using the method of claim 1.

As noted in MPEP 2144, "If such a species or subgenus is structurally similar to that claimed, its disclosure may motivate one of ordinary skill in the art to choose the claimed species or subgenus from the genus, based on the reasonable expectation that structurally similar species usually have similar properties. See, e.g., Dillon, 919 F.2d at 693, 696, 16 USPQ2d at 1901, 1904. See also Deuel, 51 F.3d at 1558, 34 USPQ2d at 1214. The utility of such properties will normally provide some motivation to make the claimed species or subgenus. Id. Dillon, 919 F.2d at 697, 16 USPQ2d at 1904-05 (and cases cited therein). If the claimed invention and the structurally similar prior art species share any useful property, that will generally be sufficient to motivate an artisan of ordinary skill to make the claimed species, In fact, similar properties may normally be presumed when compounds are very close in structure. Dillon, 919 F.2d at 693, 696, 16 USPQ2d at 1901, 1904. See also In re Grabiak, 769 F.2d 729, 731, 226 USPQ 870, 871 (Fed. Cir. 1985) ("When chemical compounds have very close' structural similarities and similar utilities, without more a prima facie case may be made."). Thus, evidence of similar properties or evidence of any useful properties disclosed in the prior art that

would be expected to be shared by the claimed invention weighs in favor of a conclusion that the claimed invention would have been obvious. Dillon, 919 F.2d at 697-98, 16 USPQ2d at 1905; In re Wilder, 563 F.2d 457, 461, 195 USPQ 426, 430 (CCPA 1977); In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claim 11 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over the claims of copending U.S. Application No.10/567,419.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

They generically overlap. The applications are drawn to a process for the preparation of conjugated linolenic acids, viz., 9cis,11trans,15cis-octadecatrienoic acid, and 9cis,13trans,15cis-octadecatrienoic acid.

The difference between the instant claims and the claims in the copending application is that in the copending claims characterized the ratios of the components in the mixture, whereas instant application is silent on these ratios.

It would have been prima facie obvious at the time the invention was made to one of ordinary skill in the art to start with the teachings of the cited copending applications to make instant applicants' process and to expect to the linolenic acids. The difference, however, does not constitute a patentable distinct, because the claims in the present invention simply fall with in the scope of copending application, since the similar reactants and conditions. Hence the instant claims overlap with the claims of the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not been patented yet.

Conclusion

9. No claim is allowed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhakar Katakam whose telephone number is 571-272-9929. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Katakam

J. PARSA
PRIMARY EXAMINER

2/16/2007